Patients and methods A retrospective study of 24 cases of neglected rupture of patellar tendon, treated between June 2000 and June 2012.
Results Our patients were 13 men and 10 women. The average age was 33 years, ranging from 21 to 52 years. Eight patients were followed for systemic diseases. The mean time to consultation was 52 days (28 days to three months). The diagnosis was done through imaging. Surgical exploration specified that the rupture was total in 19 cases, partial in five cases and located at the infra-patella in fourteen cases. All patients were operated. The repair of the lesions were made by using a fascial flap from quadriceps in 19 cases and a plasty with the semitendinosus tendon in five cases. In all cases, the tendon was put to rest and protected by a metal framing for a period. Distant results were evaluated after a mean of 27 months by Kelly and Dubourg clinical and radiological criteria. The result was fair in 18 cases and poor in 5 cases.
Discussion-conclusion The results of our work allowed us to conclude that the neglected rupture of the patellar tendon was the prerogative of the young and active adult. The only treatment is surgical. The major prognosis factor is the length of duration of the lesion. Early postoperative rehabilitation is of a great interest and determines the functional prognosis.
Keywords Patellar tendon; Neglected rupture; Surgery; Rehabilitation
Disclosure of interest The authors have not supplied their declaration of conflict of interest.

http://dx.doi.org/10.1016/j.rehab.2015.07.100

P026-e

Functional outcomes after surgical repair of acute and chronic patellar tendon ruptures

K. Belhaj (Dr)*, S. Meftah (Dr), A. Nait Khachat (Dr), F. Lmidmani (Prof), A. El Fatimi (Prof)
Service de médecine physique et réadaptation, CHU Ibn Rochd, Casablanca, Morocco
**Corresponding author.*
E-mail address: ducari83@gmail.com (K. Belhaj)

Introduction Patellar tendon rupture is an uncommon injury requiring immediate repair to restablish knee extensor continuity and to allow early motion. The aim of this study was to evaluate the clinical outcomes of surgical repair of patellar tendon rupture and compare the evolution of two groups (acute and chronic ruptures).
Materials and methods This was a retrospective study of 25 cases operated for patellar tendon rupture and followed in our department. Functional knee evaluation and quality of life were performed.
Results There were 21 men and 4 women. The average age was 33.60 years. The ruptures were fresh in 17 cases and neglected in 8 cases. There was a significant difference between the range of motion, IKS knee and IKS function when the injured leg was compared to the non-injured leg. In comparison between group with acute rupture and the other with chronic rupture, no significant difference was found in IKS knee, IKS function, SF 12 PCS, SF 12 MCS, pain score and satisfaction. Only the ROM of the knee was significantly different between two groups.
Discussion/conclusion Patellar tendon ruptures are usually complete and long-term follow-up results indicate excellent function with early repairs. Direct repair of the rupture with cerclage stabilization demonstrates good intermediate to long-term results.
Keywords Patellar tendon; Acute rupture; Neglected rupture; Functional outcomes
Disclosure of interest The authors have not supplied their declaration of conflict of interest.
Further reading
Marco Spoliti, Alessio Giai Via, Johnny Padulo, et al. Surgical repair of chronic patellar tendon rupture in total knee replacement with ipsilateral hamstring tendons. Knee Surg Sports Traumatol Arthrosc. doi:00167-014-3448-9 2014.
Chen B, Li R, Zhang S. Reconstruction and restoration of neglected ruptured patellar tendon using semitendinosus and gracilis tendons with preserved distal insertions: two case reports. Knee 2012;19(4):508–512.

http://dx.doi.org/10.1016/j.rehab.2015.07.101

P027-e

Bone graft of a femoral head by fragments of neurogenic heterotopic ossification

D. Motavasseli*, A. Diebold (Dr), A. Schnitzler (Dr), P. Denormandie (Dr), M. Popoff (Dr), F. Genêt (Dr)
Hopital Raymond Poincaré, Garches, France
**Corresponding author.*
E-mail address: d.motavasseli@gmail.com (D. Motavasseli)

Introduction Neurogenic heterotopic ossification (NHO) are a common complication after lesions of the central nervous system (10–23% after head injury). The late removal of hip NHOs sometimes causes the risk of femoral head and femoral neck fracture per or postoperatively. Indeed ankylosis of a joint eventually induces bone loss and joint destruction.
Observation A 23-year-old patient who suffered a severe TBI in 2012 in a military context presents multiple NHOs, which especially affects both hips. On the right side, CT of the pelvis shows a circumferential NHO that ankyloses the joint. The NHO therefore absorbs the stresses on the femoral head which is thus off-loaded. This causes bone loss quantified by CT. A surgical indication for excision is established for functional reasons and because of the risks of the sciatic nerve compression. A soft femoral neck is found during the procedure. A bone graft using the fragments of the NHO is attempted by internal drilling. The procedure ends with a sciatic nerve release. The rehabilitation program started after two weeks of strict bed rest in order to consolidate the bone graft. A passive mobilization program in flexion-extension is started afterward, with a gain of 10° every two weeks. Rotations and abductions-adductions are strictly prohibited during the first 6 weeks. Progressive verticalization is started after 2 months. A radiography of the pelvis shows the integrity of the femoral head 6 weeks after surgery. The patient is then placed in a wheelchair.
Discussion The NHOs must be removed as soon as they are troublesome. Late surgery is exposing the patient to a joint ankylosis which complicates the surgical procedure and its aftermath. In this case, bone grafting the femoral head with fragments of NHOs seems to be an alternative to explore in order to avoid head-neck resection or the implantation of a hip replacement. However, an extremely cautious rehabilitation seems to be necessary.
Keywords Neurogenic heterotopic ossification; NHO; Ankylosis; Bone graft; Rehabilitation; Femoral head
Disclosure of interest The authors have not supplied their declaration of conflict of interest.
Further reading
Genet F, et al. Impact of late surgical intervention on NHO of the hip after traumatic neurological injury. J Bone Joint Surg Br 2009;91(11):1493–8.
Carlier RY, et al. Ankylosing neurogenic myositis ossificans of the hip. An enhanced volumetric CT study. J Bone Joint Surg Br 2005;87(3):301–5.

http://dx.doi.org/10.1016/j.rehab.2015.07.102